NOTES ON THE GENERA MELANOLOPHIA, PHEROTESIA, AND GLENA WITH THE DESCRIPTION OF TWO NEW SPECIES FROM NORTHERN VENEZUELA

(LEPIDOPTERA: GEOMETRIDAE)

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ABSTRACT—Taxonomic notes and distribution data of species of the three genera Glena, Pherotesia, and Melanolophia are given and two species, Melanolophia misma and M. distracta from northern Venezuela, are described as new. Stenalcidia subannulata Prout is transferred to Glena (Glena subannulata (Prout), n. comb.), Melanolophia bugnathos contracta is considered to be a distinct species, Melanolophia contracta Rindge, n. status, and Boarmia contraria Walker, is synonymized with Glena bipennaria (Guenee).

The author spent June through August of 1967 in the Northern Cordillera of Venezuela at the Rancho Grande Experimental Station located in subtropical cloud forest at 1100 meters. Rancho Grande is 7 kilometers north of Maracay, Aragua and a full discussion of the habitat may be found in Beebe and Crane (1947).

Several species of the genera *Melanolophia* Hulst, *Glena* Hulst, and *Pherotesia* Dognin were collected and because Rindge (1964, 1967) has recently revised these three genera, it seems worthwhile to publish notes on the species taken at Rancho Grande. In addition, two species of *Melanolophia* are described as new.

I particularly wish to thank Dr. F. Fernandez-Yepez of the Facultad de Agronomia, Universidad Central de Venezuela for making the facilities of Rancho Grande available to me. Dr. W. Donald Duckworth of the United States National Museum helped with arrangements for the trip. Mr. D. S. Fletcher of the British Museum (Natural History) was very helpful during my stay at the museum. I also wish to thank Robert Beard for the two photographs and Dr. John G. Franclemont of Cornell for reviewing the manuscript. The Department of Entomology at Cornell University provided partial financial support during the trip to Venezuela.

Glena effusa Rindge

Glena effusa Rindge, 1967, Bull. Amer. Mus. Natur. Hist. 135:116-118.

Eight males and eight females of *effusa* were collected. This species was present during all three months.

¹ Present address: Illinois Natural History Survey, Urbana, Illinois 61801.

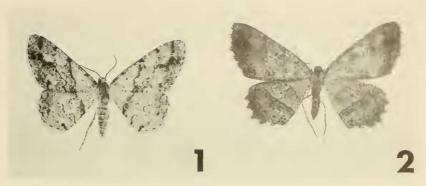


Fig. 1, Melanolophia misma, n. sp., δ , Rancho Grande, Venez. Fig. 2, M. distracta, n. sp., $\mathfrak P$, Rancho Grande, Venez.

Glena bipennaria (Guenee)

Boarmia bipennaria Guenee, 1857, Histoire Naturelle des Insectes, Lepidopteres 9:257, plate 13, fig. 5.

Boarmia contraria Walker, 1860, List of the specimens of Lepidopterous insects in the British Museum 21:354. New synonymy.

The type of *contraria* is a single female from "Rio Janeiro" and is in the Hope Museum, Oxford University. This name was overlooked by Rindge in his revision.

Glena megale Rindge

Glena megale Rindge, 1967, Bull. Amer. Mus. Natur. Hist. 135:127-128.

Nine males and one female were collected. The type of *megale* is from Mérida, Venezuela, and these specimens represent an extension of the known range of this species into the Northern Cordillera.

Glena gampsa Rindge (Fig. 5)

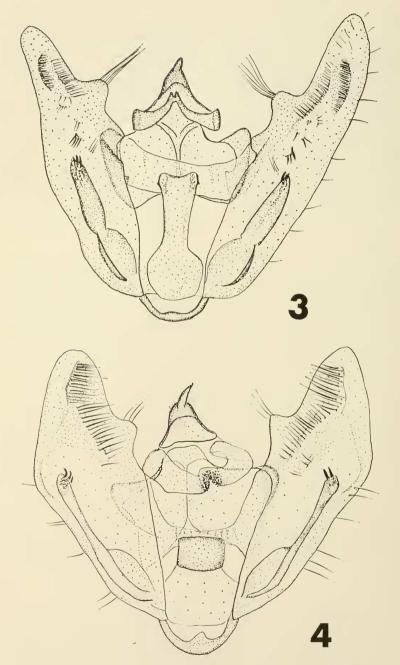
Glena gampsa Rindge, 1967, Bull. Amer. Mus. Natur. Hist. 135:144.

Ten males and five females were taken. *G. gampsa* was previously known only from the unique type from San Esteban Valley, Carabobo, Venezuela. The female genitalia are shown in fig. 5.

Glena subannulata (Prout), n. comb.

Stenalcidia subannulata Prout, 1910, Ann. Mag. Natur. Hist. 6:514.

An examination of the type of this species in the British Museum of Natural History shows it to be a species of *Glena* very closely related to *Glena* type Rindge. S. subannulata was described from a single male from Sapucay, Paraguari, Paraguay, and occurs in Paraguay and southern Brazil.



Figs. 3, 4, & genitala: 3, Melanolophia misma, n. sp.; 4, M. distracta, n. sp.

Glena tyrbe Rindge

Glena tyrbe Rindge, 1967, Bull. Amer. Mus. Natur. Hist. 135:148-149.

There is a single male of this species in the Cornell University collection from Bartica, British Guiana. This species was described from a single male from Satipo, Junin, Perú.

Pherotesia ultrasimilis Rindge

Pherotesia ultrasimilis Rindge, 1964, Bull. Amer. Mus. Natur. Hist. 126:371-372.

Four males and one female were collected. *P. ultrasimilis* was previously known from southern Perú and Bolivia. It was not common, but was collected during all three months.

Melanolophia bugnathos Rindge

Melanolophia bugnathos Rindge, 1964, Bull. Amer. Mus. Natur. Hist. 126:345–347.

Three males and three females were collected. This species was taken in all three months. The male genitalia of these specimens are almost identical with the figure given in Rindge (1964) for the Peruvian races (i.e. his nominate subspecies). There are small differences in the shape of the uncus, and the strong spine at the base of the process of the right valve is missing, although the smaller spines are present. The long process of the right valve is present. Superficially, the Venezuelan specimens are very similar to the Peruvian ones.

Melanolophia contracta Rindge, n. status

Melanolophia bugnathos contracta Rindge, 1964, Bull. Amer. Mus. Natur. Hist. 126:347.

Rindge (1964) described *contracta* as a subspecies of *M. bugnathos* from northern Ecuador. He characterized it by the lack of the long process of the right valve found in *bugnathos*. The presence of almost typical *bugnathos* in Venezuela and also from Colombia (1964) makes it more likely that it is a good species and not just a race.

Melanolophia minca Rindge (Fig. 6)

Melanolophia minca Rindge, 1964, Bull. Amer. Mus. Natur. Hist. 126:350-351.

Eight males and six females were collected. *M. minca* was previously known only from two males from Minca, Magdalena, Colombia. The female is almost identical with the male superficially. The female genitalia are shown in fig. 6.

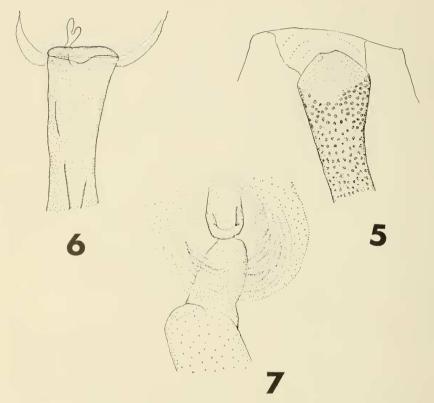
Melanolophia agnataria (Snellen)

Boarmia agnataria Snellen, 1874, Uijdschr. Ent. 17:33.

Three males and eight females were captured. *M. agnataria* is a variable species in contrast to the rest of the genus. Rindge (1964) lists the range as Colombia and western Venezuela.

Melanolophia misma, n. sp. (Figs. 1, 3)

Male—Fig. 1. Superficially very similar to conspicua Schaus. Forewing: Olive-green, the markings black, fine, and generally contrasting; a black band



Figs. 5–7, ostium and ductus bursa: 5, Glena gampsa Rindge; 6, Melanolophia minea Rindge; 7, M. distracta, n. sp.

from the upper one-fourth of the postmedial line to the upper one-fourth of the outer margin. Hindwing: Median band strong and wide; inner half of the hindwing to the postmedial line slightly lighter than the outer half. Below: Dull white, the subterminal line of the forewing wide and strongly marked; wide subterminal band also present on the upper half of the hindwing, but absent on the lower half; discal dots of the fore and hindwings small and black.

Male genitalia—Fig. 3. This species can be distinguished from conspicua by the shorter processes of the left and right valves. They are about one-half the length of specimens of conspicua from Costa Rica.

Female-Unknown.

Holotype—Male, Rancho Grande (7 km. N. Maracay), Aragua, Venezuela, 1100 meters, August 8, 1967, R. W. Poole. Type number 69953 in the United States National Museum.

Paratypes—Seven males from June 18 to August 15, 1967 from the type locality in the collections of the American Museum of Natural

History, British Museum of Natural History, Cornell University, United States National Museum, and the Facultad de Agronomia, Universidad Central de Venezuela.

Variation—One or two of the specimens are slightly lighter than the others, but this may be due to fading.

Discussion—Superficially this species is very close to conspicua Schaus but the much shorter processes of the valves and the disjunct ranges of the two species (conspicua is known only from the mountains of Costa Rica) would seem to indicate that two species are involved. Rindge's description of conspicua was based on older specimens and the species is described as buff to brown rather than the olive-green of fresh specimens.

Melanolophia distracta, new species (Figs. 2, 4, 7)

Male—Fig. 2. Very close to piura Rindge. Forewing: Dull, dark brown; some specimens with a dusting of dark brown scales, but others more uniform; lines brown; discal dot small, black; an obscure dark line in the middle of the subterminal area. Hindwing; A dull band between the discal dot and the base; postmedial line brown, double toward the inner margin. Below: Almost uniformly dark brown, with only the discal dots contrasting.

Male genitalia—Fig. 4. This species can be distinguished from piura Rindge by the equal processes of the valves. In piura the process of the left valve is much longer than that of the right valve. The uncus is triangular and rounded on top, with a long point coming from the ventral side. The gnathos is composed of two toothed lobes.

Female—Similar to the male, but with more dark scaling above than in the male, and with a distinct dark patch in the outer half of the subterminal area of the forewing along the lower radials and Ml, and with slight yellowish tinge along the lines.

Female genitalia—Fig. 7.

Variation—One of the two males is uniformly colored, but the other has the dark scaling of the females. The intensity of the brown varies slightly in the females, although not greatly.

Holotype—Male, Rancho Grande (7 km. N. Maracay). Aragua, Venezuela, 1100 meters, July 5, 1967, R. W. Poole. The male genitalia are on slide R.W.P. 11340 and the type is number 69954 in the United States National Museum.

Paratypes—One male and six females collected from June 8 to August 10, 1967 from the type locality in the collections of the American Museum of Natural History, British Museum of Natural History, Cornell University, United States National Museum, and the Facultad de Agronomia, Universidad Central de Venezuela.

Discussion-M. distracta is known only from the type locality.

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THE MALE OF MEGASOMA VOCTI CARTWRIGHT

(COLEOPTERA: SCARABAEIDAE: DYNASTINAE)

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ABSTRACT—The male of *Megasoma vogti* Cartwright is described from Mexico and Texas.

Through the kindness and generosity of Mr. Jean M. Mathieu the National Collection recently acquired a male specimen of *Megasoma vogti* Cartwright, described in 1963 from a female found in Hidalgo County, Texas (Colcopterists' Bulletin, vol. 17, p. 25). This first male specimen was collected in Mexico at Salinas Victoria, Nuevo Leon, July 4, 1963, by Col. Raul Romonfaur. Salinas Victoria is about 125 miles west of the type locality in Texas.

Allotype male: Length 33 mm., width 18 mm. Black, shining, through a thin covering of moderately long, appressed, fine, gray hair. Labrum with closely, finely punctate, distinctly sinuate anterior margin. Clypeus bidentate, the teeth triangular, widely separated by a distance one-third greater than from tips of the teeth to the genae; between the teeth a wide, relatively smooth, moderately concavely arcuate, distinct band which is closely bordered posteriorly by a rugose area of close, moderately coarse punctures; laterally the edge between teeth and genae slightly sinuate, convexly thickened; concave between this and the base of the cephalic horn which is basally as wide as the distance between the clypeal teeth, the vertical horn narrowing to two-thirds its basal width and bifurcating into two strong, fairly heavy posteriorly recurved branches whose tips are slightly arcuate toward each other; head surface behind the horn and the posterior side of the horn bearing close, fine, appressed hair directed toward tips of the horn; cephalic horn 40 mm. in height; finely, closely punctate ocular canthus 12 mm. long, its edge in outline weakly arcuate inward.

Pronotum widest and subangulate slightly behind the middle, sides posteriorly and base very narrowly margined, sides sharply edged posteriorly from slightly

Fig. 1. Upper left and center: Megasoma thersites LeConte. Upper right and bottom: Megasoma vogti Cartwright.